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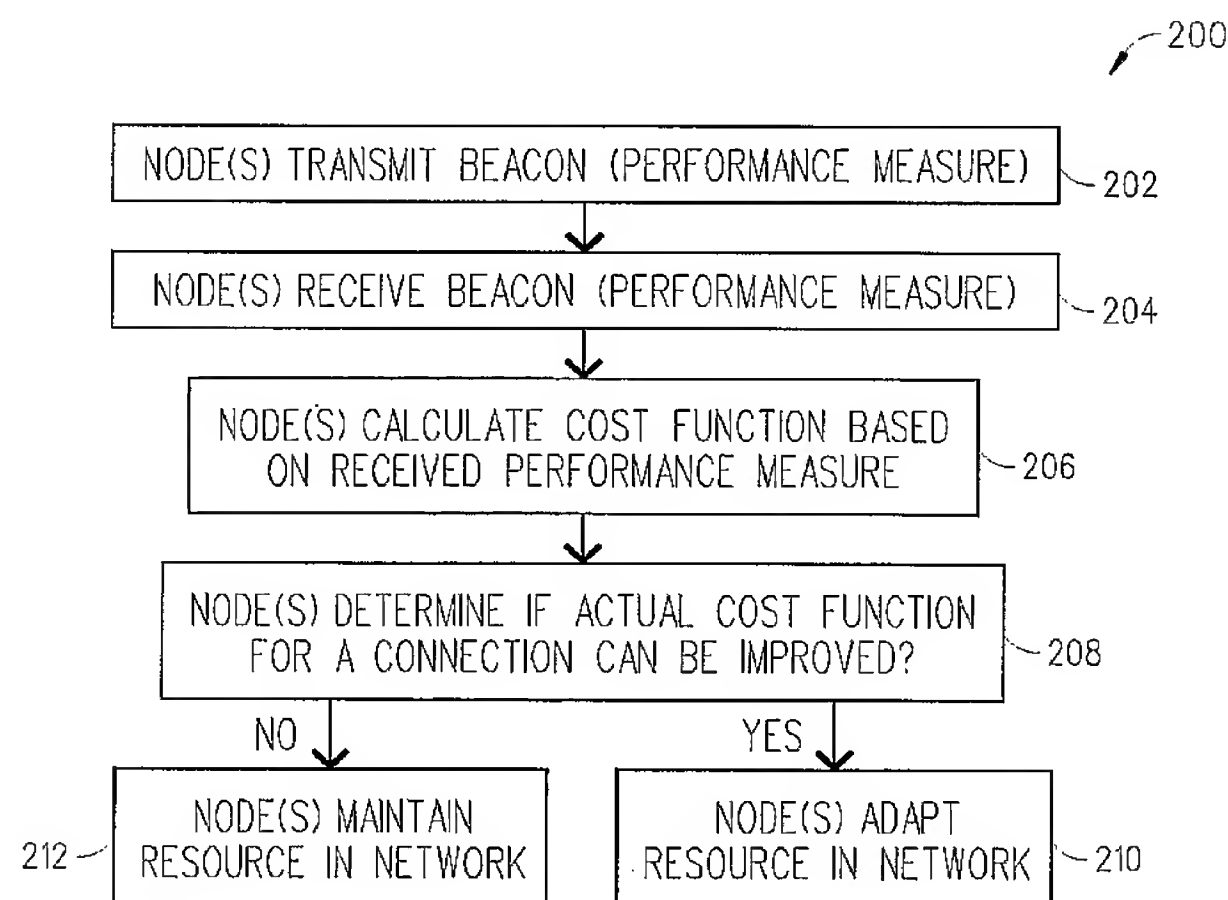
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(54) Title: FAST/OPPORTUNISTIC DISTRIBUTED RESOURCE REALLOCATION FOR ESTABLISHED CONNECTIONS IN A MULTIHOP NETWORK



(57) Abstract: A multihop network (100, 400) and nodes (102a-102q and A-G) are described herein that implement a reactive routing protocol (200) that enables resources of the multihop network (100, 400) to be continuously adapted in a distributed/opportunistic manner in response to a topology change within the multihop network (100, 400) so as to optimize the performance of a connection between a source node (102a, A) and a destination node (102m, E). The types of resources that can be adapted include for example: (1) a route; (2) a channel; and/or (3) physical layer parameters. And, the different types of topology changes that can occur include for example: (1) movement of a node (102a-102q and A-G); (2) quality variations in a channel between the source node (102a, A) and the destination node (102m, E); (3) changes in traffic patterns in the multihop network (100, 400); (4) changes in transmit patterns (e.g., power, beamforming direction) in the multihop network (100, 400); and (5) changes in resource allocations in the multihop network (100, 400).

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